

Message

From: Tesler, Theodore [thtesler@pa.gov]
Sent: 4/11/2019 1:28:12 PM
To: Royer, Matthew B [mzr154@psu.edu]; Whitcomb, Jill [jwhitcomb@pa.gov]; Trentacoste, Emily [trentacoste.emily@epa.gov]
Subject: RE: [External] Dairy precision feeding

Matt,

I recommend a discussion with Mark Dubin. He has been bird dogging this for years and I think he might have the best options for moving this forward.

As far as the model is concerned it all goes to reducing nutrients in manure, but the ability to document implementation is tough. For that reason the best way to get the data might be to approach manure testing labs or dairy feed suppliers but if adoption is quite broad (like phytase) it might just be easier to get this through changes in manure nutrients over time in combination with known implementation.

Mark would be able to give you the status of the practice with the Ag WG and bay program overall.

Let me know if you need his number, I know he can be found in the bay's website "who's who".

-Ted

From: Royer, Matthew B <mzr154@psu.edu>
Sent: Wednesday, April 10, 2019 6:02 PM
To: Whitcomb, Jill <jwhitcomb@pa.gov>; Tesler, Theodore <thtesler@pa.gov>; Trentacoste, Emily <trentacoste.emily@epa.gov>
Subject: [External] Dairy precision feeding

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Hi Jill, Ted, and Emily,

I am in the process of exploring issues of dairy precision feeding with our Dairy Extension experts in relation to our Phase 3 WIP Ag Workgroup recommendations. One thing I am trying to determine is what data or information might be required or needed to demonstrate the success of implementing this practice. I tried to find an CBP expert panel report to help guide me but could not turn one up. I do note that the following definition is given in the CBP's recently develop BMP Quick Guide:

Precision feeding "reduces the quantify of phosphorus and nitrogen fed to livestock by formulating diets with 110% of Nutritional Research Council recommended level in order to minimize the excretion of nutrients without negatively affecting milk production." That's about all I have to go on.

Do you know what data is needed to confirm that this definition is met and the practice can be counted in the model? One test Ginny Ishler has mentioned that may be a good indication for nitrogen reductions is milk urea nitrogen (MUN). Coops test for this so by working with coops, we may be able to gather a tremendous amount of data relevant to nitrogen reductions for the practice, if indeed this particular test and data are useful and credited to demonstrating precision feeding.

Any advice you can give so I can advance further conversations and research is greatly appreciated.

Thanks!
Matt

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